would balloon to several million -- virtually one for every subscriber. The equipment Ameritech uses in its local loop network was not generally designed for multiple carrier interconnection. Even if it is technically feasible to interconnect at this equipment, extensive modifications of the equipment itself would be required. The costs and time required to perform this task are unknown.

Further, practices and procedures for installing, testing, and maintaining subloop unbundling for each type of technology and equipment used in Ameritech's local loop facilities do not exist yet exist. In addition, the computerized operation support systems ("OSSs") that inventory, assess, monitor, and provision this equipment currently are not programmed to operate in a subloop interconnection environment. The underlying OSS and the administrative procedures that would be required to make any of these loop sub-elements available on an unbundled basis have not yet been developed. Given the lack of industry experience, the Commission should not mandate subloop unbundling as part of the core set of network elements.

Ameritech, therefore, recommends that the Commission refrain from adopting specific recommendations for loop sub-elements, as advocated by AT&T and MCI, and instead adopt the

approach utilized in Illinois, of requiring the prompt processing of bona fide requests for loop subelements. It is critical that the Commission not require BOCs to unbundle their loops into sub-elements as a pre-condition to applying for interexchange authority. Indeed, in evaluating AT&T's and MCI's advocacy of the imposition by federal regulation of wholly untested unbundling procedures on a nationwide basis, it should be noted that these two loudest proponents of subloop unbundling would benefit the most if the Commission's regulations on this issue delay the introduction of additional interLATA competitors.

b. Local Transport Should Be Provided, Upon Request, In Accordance With The Principles Developed In The Commission's Expanded Interconnection Proceeding.

Ameritech currently offers many forms of unbundled local transport through its access tariffs under the Commission's expanded interconnection rules. Item (v) of the competitive checklist requires the offering of "[l]ocal transport from the trunk side of a switch of a wireline local exchange carrier switch unbundled from switching and other services."[67] Ameritech agrees that meeting the expanded interconnection requirements regarding unbundling satisfies the

[67] 47 U.S.C. § 271(c)(2)(B)(v).

requirements of the 1996 Act.[68] Because unbundled transport clearly is technically feasible and meets the section 251(d)(2) prerequisites, the Commission should include a comparable unbundled transport service in the core set of network elements.

The Commission, however, should clarify that the 1996 Act does not support any arbitrary price distinction between switched and special transport. Once transport is unbundled from switching, no such distinction can be made.

c. Local Switching Should Be Provided, Upon Request, Separate From Other Services And Functions.

Ameritech agrees that unbundled local switching can be included as a core network element.[69] The legislative history of the 1996 Act cites local switching as an example of a network element[70] and item (vi) of the competitive checklist requires that BOCs offer "[l]ocal switching unbundled from transport, local loop transmission, or other services." Ameritech submits that local switching thus satisfies the

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[68] The Commission should clarify that interoffice transport should be offered separately from local loop transmission subject to its own separate unbundling requirement under section 271(c)(2)(B)(iv).

[69] See id. para. 93.

[70] See *Conference Report* at 116.

statutory test that defines the parameters of the section 251(c)(3) obligation.[71]

Ameritech is developing a product referred to as Switch Routing Service ("SRS"), which will be one more possible way to provide a local switching service on an unbundled basis. Ameritech believes SRS is technically feasible and fully consistent with the competitive checklist requirement regarding "local switching unbundled from transport, local loop transmission, or other services."[72] SRS would provide a requesting telecommunications carrier with the capability on an unbundled basis to route traffic to and from its local loops or transport interconnected to the line or trunk side, as applicable, of an Ameritech end office. The service would provide access to a group of line side ports and to trunk side ports, combined with local switching based upon route selection determined by the requesting carrier. The service also would offer optional access to resold retail central office services and usage through interface, which will provide the capability for the requesting carrier to utilize automated activation and de activation of resold network features.

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[71] 47 U.S.C. § 271(c)(2)(B)(vi).

[72] 47 U.S.C. § 271(c)(2)(B)(vi).

When SRS is used in conjunction with routing predetermined by the requesting carrier, it will route all calls originating from the interconnected local loops of the requesting carrier to interconnected dedicated transport facilities or other interconnected local loops. Both SRS and Ameritech's End Offers Integration offering would offer the capability to route terminating traffic received from interconnected dedicated transport to an interconnected local loop.

The Commission asks about the "switching platform" being proposed by some parties in Illinois.[73] This proposal has arisen in a proceeding in Illinois relating to wholesale pricing of Ameritech's retail services and is still in the concept stage and has not been defined with specificity by any of its proponents It is, therefore, too early to comment on the specific issues raised by the Commission relative to the switch platform, except to say that under any unbundled switching service the incumbent LEC must retain operational control of its switch since, even when used to provide unbundled switching, it still remains an integral part of the incumbent LEC network used to serve other customers and carriers. As the Commission has acknowledged in the advanced intelligent network proceeding, logical unbundling that gives

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[73] See *NPRM* paras 100-102.

an interconnecting carrier direct access to another carrier's switch is not now technically feasible and would create severe risks to network reliability and service quality.[74]

d. Incumbent LECs Should Provide Unbundled Access, Upon Request, To SS7 For Call Routing, LIDB, And The 800 Database.

The definition of "network element" in the 1996 Act clarifies that "databases" and "signalling" of an incumbent LEC used in the transmission, routing and other transmission of a telecommunications service can be a network element. Section 271(c)(2)(B)(x) further specifies that BOCs are required to provide "access to databases and associated signalling necessary for call routing and completion." (emphasis supplied)

Ameritech agrees with the Commission that the core network elements can include unbundled signalling and certain databases. Consistent with the 1996 Act, the core databases and signalling should be selected based upon the following principles:

1. Only signalling and databases used by a telecommunications carrier to route traffic to and from an incumbent LEC's public switched network should be unbundled;

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[74] See Intelligen Networks, *Notice of Proposed Rulemaking*, CC Docket No. 91-346, 8 FCC Rcd 6813, 6820 (1993).

2. Signalling and databases already being provided on an unbundled basis are technically feasible;

3. Signalling and databases being provided today on an unbundled basis are the ones that are needed to route and terminate traffic; and

4. Additional requests for unbundled signalling and databases should be addressed through the request and negotiation process in section 252.

Call routing and completion functions require call set-up by the signalling network and sometimes require supplemental calling functions or information such as 800 number-routing data or credit verification. As a result, incumbent LECs should be required to provide unbundled access to their System Signalling 7 ("SS7") for call set-up and their 800 database and Line Information Database ("LIDB") because such systems and databases provide the functions and data needed to route and terminate traffic between networks.

Such access to SS7, 800 database, and LIDB is technically feasible and in fact Ameritech already offers them on an unbundled basis to carriers that interconnect with it. Other systems and databases used by incumbent LECs to route and complete calls on their own networks should not be required to be unbundled unless they perform both inter-network and intra-network signalling and routing functions, such as the Signal Transfer Point ("STP") in the SS7 network.

Ameritech has been a pioneer in developing unbundled access to its SS7 network for call-set up.[75] Ameritech is offering two forms of unbundled access to its SS7 network: (1) access to SS7 signalling without requiring the purchase of voice trunking such as Feature Group D, and (2) access to Ameritech's SS7 network via transport provided by the requesting carrier or obtained from a third party. The point of interconnection for access to SS7 is Ameritech's STP. This arrangement is both technically feasible and used to route and complete calls and therefore can be added to the core list of network elements.

The 1996 Act requires access to databases on an unbundled basis only to the extent used for call routing and completion or to otherwise provide a telecommunications service. The LIDB and 800 databases fully meet this need. The Commission should not ignore this congressional limitation, founded in sound public policy objectives of encouraging innovation by competing access, by mandating unlimited access to databases. Rather, the Commission's regulations should

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[75] See Ameritech Operating Companies Petition for Waiver of Part 69 of the Commission's Rules to Establish Unbundled Rate Elements for SS7 Signalling, *Order*, DA 96-446 (released Mar. 27, 1996).

allow access beyond that necessary for call routing and completion to evolve through negotiations.

The Commission asks about access to advanced call processing functions.[76] These capabilities are offered through intelligent network databases, and Ameritech has already offered to provide database access via its Service Management System/Service Creation Environment ("SMS/SCE") in discussions with the Commission's Staff regarding its intelligent networks ("IN") proceeding. Under this proposal, the SMS/SCE would be used to provide unbundled access to advanced call processing and intelligent network features and with the ability to create new features. SMS/SCE access is still under development and not yet technically feasible.

The Commission also asks parties to identify the points at which carriers access their signalling and databases and whether other points of interconnection are technically

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[76] See *NPRM* para. 111.

[77] See generally Intelligent Networks, CC Docket No. 91-346. A continuing issue in this proceeding has been network reliability in the absence of mediation. Ameritech continues to believe that its proposal for unbundling of SMS/SCE affords third parties the opportunity to offer new services with minimum risk to network integrity and reliability. See Ameritech Ex Parte Letter of 3/13/96, CC Docket No. 91-346. Ameritech also maintains that other forms of IN access are not currently technically feasible and should be addressed via a bona fide request during the course of good faith negotiations.

feasible.[78] Interconnection with Ameritech's SS7 is offered through a Dedicated Network Access Link ("DNAL") either provided by Ameritech or the interconnecting carrier at the STP. The connection is made from the requesting carrier's Signalling Point ("SP/SSP") or its STP.

Other forms of separate access to signalling and databases used for call routing and completion should be addressed through the request and negotiation process contemplated by section 252. The negotiation and arbitration process is the best vehicle for addressing technical feasibility, as well as the desire for other forms of access to databases and signalling, and therefore should be endorsed by the Commission.

The only on-line databases used to route and terminate traffic today between carriers is the 800 database and LIDB. The 800 database provides information necessary to route 800 calls, and LIDB provides credit verification data for calling card calls. Ameritech has not identified any other databases that are used today to route and terminate traffic between carriers or that are otherwise used by another carrier to provide a competing service.

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[78] See *NPRM* para. 208.

The majority of traffic handled by LECs and IXCs is routed and terminated without access to on-line databases. Rather, traditional routing of calls is based upon the NPA-NXX code dialed by the calling party which identifies the destination of the call on the public switched network. The industry routing information is contained in the Local Exchange Routing Guide ("LERG"), a national database compiled and distributed on a nondiscriminatory basis to the industry by Bellcore.

D. Resale

1. The Reasonableness Of Any Condition Or Limitation On Resale Must Be Determined On A Case-By-Case Basis.

The statutory language of sections 251(b)(1) and 251(c)(4)(B) requires both LECs and incumbent LECs not to prohibit resale and not to impose unreasonable or discriminatory terms and conditions on resale. Reasonable restrictions on resale, however, have long been recognized by the Commission as appropriate to further public policy objectives,[79] and Congress did not change that determination in the 1996 Act.

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[79] See Regulatory Policies Concerning Resale and Shared Use of Common Carrier Domestic Public Switched Network Services, *Report and Order*, 83 F.C.C.2d 167, 174 n.17 (finding certain price discriminations lawful); see also Petitions for Rule Making Concerning Proposed Changes to the Commission's Cellular Resale Policies, *Notice of Proposed Rulemaking and Order*, 6 FCC Rcd 1719, 1721 (1991).

In response to the Commission's request for comment on what limitations may be imposed on resale,[80] Ameritech maintains that the reasonableness and non-discriminatory nature of any restrictions should be left to the states[81] based on the specific facts presented. State commissions not only have the experience necessary to balance competing interests in opening local exchange services to competition, but have an important role in ensuring resale is implemented consistent with other public interest policies. States are also in the best position to make such determinations, especially where important issues such as state-specific universal service policies are concerned.

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80 See *NPRM* paras. 175 & 197.

81 The Commission suggests that "restrictions and conditions [on resale] are likely to be evidence of an exercise of market power" and that the range of permissible restrictions should be quite narrow. *NPRM* para. 175. Although in certain contexts, Ameritech might agree with this observation, it seems ill-suited to the resale of local exchange services. For example, it would hardly be an exercise of market power to establish class-of-user restrictions on the resale of flat-rated services that an incumbent LEC itself offers only to residential subscribers. Indeed, without such restrictions, competing LECs would be able to purchase services at prices well below cost. Similarly, restrictions on the resale of services that are already priced below cost would appear to be reasonable and not the result of any market power. In fact, rates and rate structures for local exchange service are, in large part, a reflection of public policy goals. Resale at wholesale rates, therefore, may be untenable in a variety of contexts that have nothing to do with market power.

At the same time, Ameritech believes it would be appropriate for the Commission to establish some general principles that could guide the states as they consider the reasonableness of any particular resale limitation. One principle the Commission should establish is that in determining reasonableness states should consider whether the benefits to the public outweigh any alleged harm posed by the restrictions.[82] For example, the state should consider whether the condition or limitation furthers or inhibits competition or some other state interest, such as universal service.[83] Moreover, as the Commission recognizes, the federal implement-

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[82] See Petitions for Rule Making Concerning Proposed Changes to the Commission's Cellular Resale Policies, *Notice of Proposed Rule Making and Order*, 6 FCC Rcd 1719, 1721 (1991) (weighing harm to the public posed by restrictions against countervailing benefits to the public for purposes of determining whether resale restrictions are just and reasonable within the meaning of Section 201(b) of the Communications Act).

[83] ALTS argues that "there should be no prohibitions or restrictions on the resale of the service of dominant issuers." ALTS Handbook at 17. This argument ignores the plain language of section 251(c)(4), which prohibits only "unreasonable or discriminatory conditions and limitations" on the resale of telecommunication services. Finally, it ignores that the Commission resale policies have never been limited only to dominant carriers, but rather apply to all common carriers. See Petitions for Rule Making Concerning Proposed Changes to the Commission's Cellular Reale Policies, *Report and Order*, 7 FCC Rcd 4006, 4006 (1992) (summarizing evolution of Commission's policy on resale developed under sections 201(b) and 202(a) of the Communications Act).

ing regulations mu t reflect the permissibility of class-of-subscriber restric ions expressly contemplated under section 251(c)(4)(B).[84] Th se restrictions, however, should not be narrowly limited t services offered at "subsidized prices."[85]

The fede al regulations also should confirm that a reasonable state c rtification or licensing requirement for the resale of the equested services, such as the one required in Illinois in ord r to resell residential services,[86] is neither a prohibit on or an unreasonable restriction on re-sale, nor a barrie to entry into local service prohibited by section 253.

Ameritec believes that additional examples of reasonable, nondis riminatory resale restrictions exist for the following serv ce categories: (1) grandfathered services; (2) sunsetted serv ces; (3) service requiring "build out" of additional facilit es.

Grandfat ered and sunsetted services are essentially obsolete offerings [87] Grandfathered services are limited to

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84 See *NPRM* para. 176.

85 See id.

86 See Customers First Order at 66-67.

87 Grandfathering undertaken as a result of the 1996 Act, (*e.g.*, any widespread grandfathering) should be viewed with suspicion.

customers who previously established a relationship to the service. They are not offered to new customers because of changes in technology or because the particular service offering has been superseded by a newer service offering. Sunsetted services are similar to grandfathered services except that a point has been set when the service will be terminated for all customers. Services that are grandfathered or sunsetted are not retail offerings held out to the general public; accordingly, the 1996 Act's wholesale requirements do not apply.[88] The concept of "grandfathering" is necessary, especially in an industry with significant technological improvements, to avoid the need to continue to deploy obsolete and inefficient technology. It makes no practical sense to require a provider to continue offering a service to resellers that is no longer being offered at retail, particularly when substitute services are available for resale. In fact, the incumbent LEC and the reseller will be using the same newer offering when competing for customers on a going-forward basis. Furthermore, LECs will incur unreasonable administrative burdens to offer obsolete services at wholesale rates (*e.g.*, development of wholesale cost data to support the

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[88] As such, a grandfathered or sunsetted service is not within the definition of a telecommunication service because it is no longer offered to the public. 47 U.S.C. § 153(46).

pricing, creation of interfaces for ordering, and establishment of billing mechanisms); such burdens would outweigh any alleged competitive benefits.

The Commission guidelines should also reflect the reasonableness of state rules that prohibit resale rates that are below cost. Such a limitation on resale is reasonable and nondiscriminatory. Indeed, section 254(k) of the 1996 Act and the takings clause of the United States Constitution (as well as several state constitutions) would preclude any requirement that incumbent LEC offer services for resale to competitors at prices below cost.

2. Section 251(c)(4) Does Not Preclude Retail Discounts And Promotions.

The Commission has specifically requested comment on discounted and promotional offerings.[89] The resale obligation of section 251(c)(4) should not be construed in a way that would prohibit or discourage discounts, service packages, or bona fide promotions, provided that promotional rates do not fall below wholesale rates.

The Commission has long recognized that promotions foster competition, stimulate network usage, and increase

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[89] See *NPRM* para. 75.

customer awareness of products and services.[90] Such marketing tools are standard for LECs and resellers alike. Requiring LECs to offer promotions for resale -- particularly at wholesale rates -- would effectively preclude LEC use of such promotions. Congress could not have intended to create a competitive local marketplace where LECs are denied the tools routinely used by all carriers to promote network usage, or where consumers are denied the benefits that promotions can offer. Thus, the Commission's rules should permit bona fide promotions (*e.g.*, offer service promotions made available to retail customers for a total duration not to exceed 120 days in a calendar year without an obligation to furnish for resale the promoted service at a discount below the pre-promotion wholesale price.

Indeed promotions do not constitute a "service" to which the resale provisions of the 1996 Act apply. Promotions are not services per se, but simply short-term marketing tools that have distinct and long-recognized purposes. Promotional pricing therefore should not be factored into the calculation of wholesale rates

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[90] See Policy and Rules Concerning Rates for Dominant Carriers, *Memorandum Opinion and Order on Reconsideration*, 6 FCC Rcd 665, 670 (1991). Policy and Rules Concerning Rates for Dominant Carriers, *Order and Notice of Proposed Rulemaking*, 8 FCC Rcd 3715, 3716 n.11 (1993).

3. The Wholesale Rate Structure Should Not "Mirror" The Retail Structure.

The federal regulations should address the treatment of services for which there may be multiple rates (*e.g.*, single services with off-peak and on-peak rates, or bundled discount packages). Sections 251(c)(4) and (b)(1) of the 1996 Act require resale of services, not pricing plans. Accordingly, any federal regulations should confirm that the 1996 Act does not obligate incumbent LECs to mirror their retail rate structures, including every single price variation for every service offered. Indeed, requiring LECs to mirror their retail rate structure could inflate the costs of wholesaling and create administrative burdens in developing and restructuring thousands of retail rates. For example, mirroring the wholesale rates to the existing retail rate structure could prevent the incumbent LECs from restructuring complicated existing retail rates to make them more simple and understandable. The federal regulations ultimately adopted should provide that LECs may offer a single resale rate when more than one retail rate is offered in connection with a single service (*e.g.*, a service with peak and off-peak rates), provided that the single rate represents the weighted average of all of the retail rates, less avoided costs, for the service in question.

III. NATIONAL PRICING PRINCIPLES UNDER THE ACT MUST ENCOURAGE EFFICIENT COMPETITION WHILE AT THE SAME TIME COMPENSATING NETWORK PROVIDERS AND MAINTAINING AFFORDABLE RATES.

A. The Commission Should Establish Core Principles For Interpreting The Pricing Requirements Of The 1996 Act.

Perhaps the most important challenge presented by the 1996 Act is the proper pricing of the various services and facilities that competitors will need to purchase from the incumbent local exchange providers. As with most aspects of the 1996 Act, Congress has first left it to negotiating parties to agree on the rates to be charged for interconnection, network elements, reciprocal compensation, and wholesale services. Nonetheless, the Commission should establish core principles for interpreting the pricing requirements of the 1996 Act, not just to give guidance to negotiating parties, but also to provide assistance to states seeking to arbitrate or tariff these services and facilities.

Any set of principles that the Commission establishes must accommodate three basic goals of the 1996 Act: (1) facilitating efficient local exchange competition, (2) keeping telephone rates affordable, and (3) compensating network providers for their costs. Properly articulated, a pricing policy can harmonize all three of these goals. It is critical, however, that all of the concerns be addressed.

Ameritech proposes the following set of principles, each of which is discussed in greater detail below, as appropriate for national pricing guidelines.

First, to insure that prices properly compensate the network provider, rates must cover the forward-looking incremental costs, the joint costs, and the common costs of the service or facility. Setting prices for all services at long run incremental cost will not pay for the entire network. Incumbent LECs must, at the very minimum, be permitted to charge for forward looking joint and common costs.

Second, residual costs cannot be ignored. At a minimum, the Commission should not preclude states from determining to what extent such costs are appropriately recovered in the rates for facilities and services provided by incumbent LECs to competitors. If the Commission ultimately decides it should establish a specific policy regarding residual costs, it should declare that residual costs are properly recoverable.

Third, states that have already set prices in accordance with their views of costs should not be forced to readdress their cost methodologies as long as they are consistent with the 1996 Act's pricing standards. There is no one single correct method for defining what costs are incremental,

shared, joint, or residual with respect to any facility or service. The Commission should allow states that have adopted cost methodologies consistent with the 1996 Act to continue to use them even though there may be some variation among states in the actual application of methodologies. Moreover, the development of proxy costs or prices is, for the most part, a waste of time where states have already adopted cost methodologies. Accordingly, if the Commission chooses to provide guidance on what would be an appropriate proxy, it should clarify that the use of such proxies is unnecessary in those states where appropriate cost and pricing methodologies exist.

Fourth, prices must be set to encourage efficient entry and to discourage inefficient entry. Such prices should ensure that incumbents are encouraged and able to continue investing in their networks and that competitors are not discouraged from building their own networks to compete with the incumbent's facilities.

Finally, although open, unrestricted competition is the long-term vision, the 1996 Act is nevertheless replete with examples of specific policy mandates that could not be sustained in the face of unrestricted competition, such as specified averaged rate structures for end users and certain

other mechanisms designed to maintain universal service.[91] Accordingly, pricing policies must reflect the fact that end user prices today, as well as for the near term, do not appropriately reflect costs.

B. Pricing Must Compensate The Network Provider For Its Costs.

In adopting national pricing principles, the Commission must ensure that incumbent LECs have the opportunities to recover all costs.[92] As the Commission correctly notes, Ameritech advocates a methodology based, in part, on Total Service Long Run Incremental Cost ("TSLRIC"), but contends that other costs must also be recovered from the services

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91 See, e.g., 47 U.S.C. § 254(g) (requiring geographic averaging of rates for interexchange services to ensure that subscribers in rural and high cost areas are able to continue to receive both intrastate and interstate interexchange services at rates no higher than those paid by urban subscribers).

92 Indeed, Congress did not merely *imply* that the requesting carrier pay the cost of access to unbundled network elements. See *NPRM* para. 88. Rather, that is exactly what Congress required in Section 252(d)(1). See H.R. Rep. No. 204, 104th Cong., 1st Sess. 71 (1995), reprinted in 1996 U.S.C.C.A.N. (104 Stat.) 10, 37 [hereinafter *House Committee Report*] (noting that the House Commerce Committee deleted the requirement that unbundling be done on an economically feasible basis and clarifying that the beneficiary of unbundling must pay its cost).

subject to the section 252(d)(1) pricing standard on the same basis as any other service.[93]

1. Cost Means TSLRIC, Joint, Common, And Residual Costs.

The total costs of a telecommunications firm, like any multiproduct firm, are divided into four categories: (1) direct incremental costs (*i.e.*, TSLRICs); (2) joint (or shared) costs; (3) common costs (or overhead); and (4) residual costs. Each of these categories of costs is substantial. For example, only 55% of the total costs of Ameritech Illinois (on a base of $2.4 billion) is incremental to specific services as defined by the Illinois Commerce Commission ("ICC"). The costs break down as follows:

Incremental	55%
Joint	12%
Common	15%
Residual	18%

In order to satisfy the intent of the 1996 Act and to satisfy economic efficiency principles, pricing should reflect all categories of cost

a. Direct Incremental Costs

TSLRIC is the specific cost related to a particular service that the firm, using the best available technology, would save if it stopped providing that service entirely, but

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[93] See *NPRM* para. 29.

continued to provide all other services at their current levels. The TSLRIC of providing any service includes all the costs of capital,[94] labor, materials, and other costs that are incurred by the provision of such service, given all the other services the firm is also providing.

TSLRIC differs from Long Run Incremental Cost ("LRIC").[95] LRIC is the incremental cost of producing an additional quantity of a particular service and equates more closely with the economist's concept of marginal cost. LRIC applies to a specific unit or increment of output and will vary depending on the overall level of service produced. There is only one value of TSLRIC for a service since it reflects the incremental costs of providing the entire service. LRIC varies with the level of output and, as such, is usually is difficult to measure. Isolating a specific incre-

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[94] A component of each of the four cost categories is the cost of acquiring capital assets, which includes not only the recovery of the invested capital, but also the cost of money. In general terms, the cost of money is the return that a firm must pay, on average, to attract funds away from other investment opportunities of comparable risk. Under standard economic principles, the cost of money is considered a cost, rather than profit, because covering the cost of money is just as necessary for long term survival of incumbent LECs as covering any incremental, joint, or common costs. See Edgar K. Browning & Jacquelene M. Browning, Microeconomic Theory and Applications (4th ed. 1992).

[95] See *NPRM* para. 126 (requesting comments on differences between TSLRIC and LRIC analysis).

ment of output and determining the specific costs associated with that output may be impossible to achieve with any precision.[96] For example, some costs that may be incurred in the provision of one increment of output may no longer have to be incurred in the next increment of output. The TSLRIC standard does not suffer from this shortcoming because it looks at the costs of the entire service. Accordingly, TSLRIC is the standard that Ameritech recommends be adopted by the Commission.

b. Joint (Or Shared) Costs

Joint (or shared)[97] costs are those costs incurred in the provision of a group or family of services, but which are not incremental to any one service individually. Joint costs thus could be avoided only by eliminating the entire group or family of services. As with TSLRIC, joint costs include the cost of the capital, labor, materials, and other costs associated with the provision of a group or family of services. The capital assets, labor, materials, and other inputs that are shared within a family of services or facilities, and thus attributed to joint costs, are different from those that are as-

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[96] Id. at 70-77.

[97] Joint costs are sometimes called "shared" costs. See, e.g., Proceedings To Refine the Definition of, and Develop a Methodology To Determine, Long Run Incremental Cost for Application Under 1991 PA 179, *Opinion and Order*, Docket No. U-10620, at 14 (Mich. Pub. Serv. Comm'n 1994).